

WHAT IS CLAIMED IS:

1. A coupling device having a first end for mating to a first connector of a first mating device and having a second end for mating to a second connector of a second mating device, the coupling device comprising:
- 5 a conductor for extending and retracting at the first end, wherein said conductor is biased to remain retracted but is extendable to make an electrical connection with the first connector of the first mating device.
- 10 2. The coupling device of claim 1, further comprising:
- a spring for providing spring pressure; and
- a spring cylinder, connected to said spring, for cooperatively biasing said conductor to remain retracted while under the spring pressure and for allowing said conductor to extend and make an electrical connection with the first connector of the
- 15 first mating device.
3. The coupling device according to claim 2, wherein said spring cylinder allows said conductor to extend and make the electrical connection with the first connector of the first mating device, when the first connector is pushed towards the
- 20 spring sleeve a pre-specified amount.
- 4 The coupling device according to claim 2, further comprising an external threaded portion disposed at the first end for threading onto an internal

threaded portion of the first connector so as to push the first connector toward the spring cylinder.

5 5. The coupling device according to claim 4, wherein said conductor
makes the electrical connection with the first connector only when a pre-specified
amount of torque has been applied to thread the internal threaded portion onto the
external threaded portion.

10 6. The coupling device according to claim 2, wherein said spring sleeve
comprises a spring clip insulator having a cut there through, said spring clip insulator
for expanding and opening at the cut to allow said pin receptor to pass there through
to make the electrical connection, only when the pre-specified amount of torque has
been applied to thread the internal threaded portion onto the external threaded
portion.

15

7. The coupling device according to claim 2, wherein said coupling device
further comprises a housing having an internal threaded portion at the second end for
mating with an external threaded portion of the second connector and having an
external threaded portion at the first end for mating with an internal threaded portion
20 of the first connector.

8. The coupling device according to claim 7, wherein said spring cylinder
allows said conductor to extend and make the electrical connection with the first

connector of the first mating device, only when the external threaded portion at the first end of the housing of the coupling device is threaded onto the internal threaded portion of the first connector using a pre-specified amount of torque.

5 9. The coupling device according to claim 2, wherein a pre-specified amount of torque is required to push the first connector towards the spring cylinder to make the electrical connection and to ensure a minimum verifiable level of performance from the coupling device with respect to the electrical connection.

10 10. The coupling device according to claim 1, wherein at least one of the first mating device and the second mating device is one of a coaxial cable and a tap block.

 11. The coupling device according to claim 1, wherein the first connector of
15 the first mating device is a male connector having a pin, and said conductor comprises a pin receptor for receiving the pin.

 12. The coupling device according to claim 1, wherein the first connector of
the first mating device is a female connector having a pin receiving portion, and said
20 conductor comprises a pin for being received by the pin receiving portion.

13. A method for providing connectivity between a first connector of a first mating device and a second connector of a second mating device, the method comprising the steps of:

providing a coupling device having a first end for mating to the first connector
5 of the first mating device and having a second end for mating to the second connector of the second mating device, the coupling device being capable of furnishing a measurable indication when at least the first end is connected to the first connector using a torque value outside of a pre-defined range; and

connecting at least the first end of the coupling device to the first connector
10 using a torque value within the pre-defined range.

14. The method of claim 13, further comprising the step of confirming an integrity of connections between at least the first end and the female connector, to ensure that the connections were made using the torque value within the pre-defined
15 range.

15. The method of claim 14, further comprising the step of arranging measurement instrumentation proximate to the coupling device to measure operational parameters thereof.

20

16. The method of claim 15, further comprising the step of maintaining the measurement instrumentation proximate to the coupling device for additional subsequent measurement sessions.

17. The method of claim 15, wherein said measurement instrumentation is arranged to allow remote measurement of the operation parameters with respect to a location of the coupling device.

5

18. The method of claim 15, wherein the operation parameters comprise at least one of Cumulative Leakage Index (CLI), voltage, current, resistance, impedance, and magnetic flux.

10 19. The method of claim 13, wherein the measurable indication indicates tampering with the coupling device subsequent to said connecting step.

20. A coupling device having a first end for mating to a female connector of a first mating device and having a second end for mating to a male connector of a second mating device, the coupling device comprising:

a pin assembly for extending and retracting at the first end; and

a pin receptor for extending and retracting at the second end,

wherein said pin assembly is biased to remain retracted but is extendable to make an electrical connection with the female connector of the first mating device,

20 and

wherein said pin receptor is biased to remain retracted but is extendable to make another electrical connection with the male connector of the second mating device.

21. The coupling device of claim 20, further comprising:

a spring for providing spring pressure; and

a spring sleeve, connected to said spring, for cooperatively biasing said pin

5 assembly to remain retracted while under the spring pressure and for allowing said
pin assembly to extend and make an electrical connection with the female connector
of the first mating device.

22. The coupling device of claim 20, further comprising:

10 a spring for providing spring pressure; and

a spring cylinder, connected to said spring, for cooperatively biasing said pin
receptor to remain retracted while under the spring pressure and for allowing said pin
receptor to extend and make an electrical connection with the male connector of the
second mating device.

15